



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 8**  
**999 18<sup>TH</sup> STREET - SUITE 300**  
**DENVER, CO 80202-2466**  
**<http://www.epa.gov/region08>**

**UNDERGROUND INJECTION CONTROL PROGRAM**

**Draft Permit**

Class V Shallow Injection Well

Permit No. CO50924-04915

**DRAFT**

Issued to:

**Colorado Division of Wildlife**  
Foothills Wildlife Laboratory  
4330 La Porte Avenue  
Fort Collins, Colorado 80521

Date Prepared: January 2005

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**PART I. AUTHORIZATION TO OPERATE A CLASS V WELL  
AUTHORIZATION TO INJECT**

Pursuant to the Underground Injection Control (UIC) Regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR), Parts 124, 144, 146, and 147,

Colorado Division of Wildlife  
Foothills Wildlife Laboratory  
4330 La Porte Avenue  
Fort Collins, Colorado 80521

is hereby authorized to inject into the Class V shallow injection well connected to the necropsy laboratory, located at 4330 La Porte Avenue, Fort Collins, Larimer County, Colorado. Injection will be used to dispose of sanitary and gray waste water and laboratory waste fluids after treatment by a prion inactivation process from the above-mentioned facility into or above the underlying aquifers in accordance with conditions set forth herein.

All conditions set forth herein refer to 40 CFR, Parts 124, 144, 146, and 147 and are regulations that are in effect on the date that this permit is issued.

This permit consists of a total of 15 pages, plus four (4) appendices and all items listed in the Table of Contents. Further, it is based upon representations made by the permittee and on other information contained in the administrative record.

The authorization to inject is issued for a period of ten (10) years from the effective date of this permit, unless the permit is terminated (Part III, Section B). The permit will expire upon delegation of primary enforcement responsibility for the UIC Program to the State of Colorado.

Issued this \_\_\_\_\_ day of \_\_\_\_\_.

This permit shall become effective \_\_\_\_\_.

\_\_\_\_\_  
Stephen S. Tuber

Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

## PART II. SPECIFIC PERMIT CONDITIONS

### A. GENERAL

The permittee shall at all times operate in compliance with the conditions established in this permit. Any activities not compliant with the conditions of this permit will be considered a violation and may be subject to enforcement action and subsequent penalties per Part III, Section E3.

The permit number the UIC Program Director (hereafter referred to as the "Director") has assigned to this permitted injection well is CO50927-04915. All correspondence should reference the site name and address and include the EPA Permit number. Copies of all reports and notifications required by this permit shall be signed and certified in accordance with the requirements under Part III, Section E9 of this permit and shall be submitted to the attention of the representative of the Director indicated below:

U.S. Environmental Protection Agency - Region 8  
Attention: Carol Hutchings  
8ENF-UFO  
999 18th Street, Suite 300  
Denver, Colorado 80202-2466

### B. SHALLOW INJECTION WELL CONSTRUCTION

1. Construction Requirements. This permit requires that the well construction adhere to the information provided in the approved permit application. The septic system construction diagram is included in Appendix C.

2. Proposed Changes. The permittee shall give advance notice to the Director as soon as possible and no later than 30 calendar days **before** any planned physical alterations or additions to the permitted shallow injection well (leachfield). Alterations of the permitted shallow injection well shall meet all conditions as set forth in this permit. An alteration or addition shall be considered as any work performed which affects the septic tank, the pipes leading from the facility to the inlet of the septic tank, the pipe leading from the septic tank to the leachfield, the pipe in the leachfield, any change which affects the quantity or quality of the fluid being injected, or filtration and effectiveness of treatment provided by the leachfield.

After approval by the Director, the permittee shall provide plans, as-built schematics, sketches, or other test data, to the Director within 60 calendar days of completion of the alteration or addition which took place.

### C. CORRECTIVE ACTION

The release of prion-inactivating agents into the septic system has the potential to destroy the microbial populations in the septic tank and beneath the leachfield that treat the sanitary waste. The permittee shall verify that the septic system is functioning properly by providing the Director with analytical results from samples collected according to Part II, Section E. If the septic system microbes are not able to treat sanitary waste effectively, Corrective Action is required to rehabilitate the septic tank, with subsequent sampling to provide verification that the septic system is functioning properly. If rehabilitation is unsuccessful, then closure of the existing system and replacement with a new system may be necessary.

### D. SHALLOW INJECTION WELL OPERATION AND MAINTENANCE

1. Injection Location. The injection activities authorized by this permit are limited to the septic system physically connected to the necropsy laboratory located at 4330 La Porte Avenue, Fort Collins, Colorado. There are other septic systems located on the property, but no other septic systems are authorized to receive any

waste fluids other than sanitary waste. Any approval granted by the Director for the change in injection location shall require modification under 40 CFR, §144.39 or §144.41, which authorize major and minor modifications, respectively, to a UIC permit.

2. Injection Fluid Limitations. This permit authorizes release into the septic system of the following waste streams:

- treated laboratory waste fluids as indicated in the Best Management Practices in Appendix A, and
- sanitary and gray water waste from the bathroom, shower, and washing machine from the office building adjacent to the necropsy laboratory.

There is also a Biosafety Level 2 (BL2) laboratory and the DNA/PCR laboratory in the office building. This permit also authorizes the release of fluid wastes from these laboratories under the condition that all Best Management Practices (BMPs) described in Appendix A have been followed to minimize the potential for untreated Chronic Wasting Disease (CWD) prions in the waste stream to enter the septic system.

The prion-inactivation process described in the BMPs in Appendix A is required before any waste fluids from the laboratory are released to the septic system. Any wash or rinse water released to the septic system before the prion-inactivation step has the potential to release untreated CWD prions and is considered to be a violation of this permit. Detergent-based wash water on the laboratory floor and work surfaces that has not been treated with 5% Environ<sup>®</sup> LpH (LpH) for a minimum of 30 minutes of wet contact time (or another approved agent that has been demonstrated to inactivate prions) has the potential to contain untreated CWD prions.

If the permittee is able to provide documentation that other products are effective for the inactivation of prions, then the Director may authorize the use of these products as a minor modification of the permit. However, these other products must be used according to labeling directions and precautions or specific terms and conditions of an emergency exemption granted by EPA under the Federal Insecticide, Fungicide and Rodenticide Act and in a manner consistent with other requirements of the permit.

3. Waste Fluid Analysis Standards. The concentration of any constituent in the injected fluid shall not exceed any Maximum Contaminant Limit (MCL), Health Advisory Lifetime concentration (HAL), as listed in EPA document 822-R-04-005) or Region 8 permit limit. The list of constituents to be analyzed, permit limits, and analytical methods to be used are included in Appendix B.

If an analysis of the waste fluid shows that the waste fluid exceeds any MCL, HAL, or other permit limit, the Director **must** be notified within 24 hours, per Part III, Section E10(c) of this permit. Immediate corrective action must be taken to comply with the requirements in this permit, and a verification sample must be collected and analyzed immediately. If the analytical results confirm that the above limits have been exceeded, the Director must be notified within 24 hours after the permittee has received the follow-up analytical results. The Director will subsequently notify the permittee if injection activities must cease and determine any further corrective action that must be taken.

Formaldehyde shall be collected after use and disposed of in an authorized manner. Animal tissue and body fluids shall be handled according to the BMPs in Appendix A, to minimize the release of untreated CWD prions into the septic system. The permittee shall adhere to the BMPs that inactivate prions prior to fluid waste reaching the septic system. The permittee shall not inject any hazardous substances, as defined by 40 CFR, Part 261, at any time during the operation of the facility.

4. Leachfield Surfacing. If, at any time, there is fluid on the top of the ground surface above the leachfield or adjacent to the leachfield resulting from the leachfield overflowing, this is considered a violation of the permit, and the disposal of fluid to the leachfield must cease immediately. The Permittee shall notify the Director within 24 hours after the leachfield first began to overflow. Remediation or replacement of the septic system will be required.

5. Best Management Practices. The permittee shall operate the facility in such a way that Best Management Practices (BMPs) are available to all facility personnel and are strictly followed. The BMPs listed in Appendix A are enforceable permit requirements.

6. Accidental Spills. To reduce the potential for contamination in the waste water, accidental spills shall either be collected with absorbent material, and disposed of as a solid waste per the requirements of the Resource Conservation and Recovery Act (RCRA), or be inactivated or decontaminated according to BMPs before rinsing down the floor drain. If unauthorized substances above reportable quantities per 40 CFR Table 304.2 enter the septic tank, within 24 hours after the incident, the Permittee shall notify the Director of the fact that the spill occurred and the type of substance entering the septic system. The Permittee shall collect fluid samples from the septic tank and analyze them for constituents determined by the Director. The Permittee shall notify the Director of the analytical results within 24 hours after analytical results are received. In each case, the 24 hour notification shall be followed by written notification within 5 days, per Part III, Section E10(c).

#### E. MONITORING AND REPORTING OF RESULTS

1. Septic Tank Monitoring and Maintenance. Because the decontamination fluids entering the septic tank have the potential to sterilize microbes in the tank, which would accelerate the accumulation of sludge in the tank, the tank sludge level shall be inspected annually. The tank should be pumped if the sludge layer has built up to within 18 inches of the tank outlet or if the scum layer thickens to within 3 inches of the bottom of the outlet baffle or sanitary tee. The condition of the sludge level should be included annually in one of the sampling reports. The septic tank shall be pumped by a licensed septage hauler, who is operating in accordance with 40 CFR, Parts 403 and 503. Documents related to septic tank pumping shall be maintained on site.

2. Disposal Requirements. Sediment and solid material removed from septic tank should be treated using high temperature incineration or alkaline hydrolysis, or otherwise disposed of in accordance with Federal, State and local regulations and requirements.

3. Shallow Injection Well Sampling Program. Waste fluid samples shall be collected quarterly (every three (3) months) by the permittee or designated representative from two locations relative to the septic system connected to the necropsy laboratory.

- (a) The first sampling location is the septic tank. Fluid samples from the tank shall be analyzed for Total Metals, Volatile Organic Compounds using EPA Method 524.5 or 8260, Semivolatile Organic Compounds using Method 8270, and Biological Oxygen Demand using either EPA Method 405.1 or Standard Method 5210B. (If the permittee demonstrates that other analytical methods are comparable to those previously listed, the Director may approve additional analytical methods as a minor modification of this permit.)
- (b) The second location is fluid collection device, such as a lysimeter, that can collect a downward percolating fluid sample installed approximately two (2) feet below the bottom of the gravel bed beneath the leachfield. A fluid sample shall be collected from this device and analyzed for Biological Oxygen Demand using one of the methods listed above.

The sampling techniques used must ensure that the fluid samples are representative of the waste stream at each respective point, and that the sample can be analyzed using the specified methods. Sample shall be handled according to protocol that will ensure analytical results will accurately represent the waste fluids. The protocol

shall include proper sample containers, preservation methods, and chain of custody. The list of the individual analytes and associated permit limits are included in Appendix B.

The constituents analyzed as conditions of this permit are based on chemicals of concern used at the facility that could potentially be components of the waste stream. The Permittee must notify the Director in advance of any changes in laboratory processes or chemicals used at the facility before these changes are implemented. The Director, at his or her discretion, may add or subtract analytes to/from the list of constituents for which analyses are required as conditions of this permit. The Director may change the list of analytes required under this permit as a minor modification of the permit.

To determine compliance with the permit requirement to demonstrate that the septic system must not be sterilized (Part II, Section C), the analytical results for Biological Oxygen Demand (BOD) in each of the two (2) samples (one sample collected from the septic tank; the second sample collected two (2) feet below the leachfield) will be compared. If the septic system is functioning properly, then the BOD value of the sample collected beneath the leachfield will be 20 mg/L or less, or show a reduction in BOD of 90% compared to BOD measured in the sample collected from the septic tank. If these values are not met, then corrective action may be necessary per Part II, Section C.

4. Installation of Fluid Sample Collection Device under Leachfield and Pre-Notification Requirement. At 2 feet beneath the leachfield, the Permittee shall install a fluid sampling device that can collect a fluid sample percolating downward from the leachfield through the vadose zone in the soil above the water table, per Section 3b above. This device shall function similarly to a lysimeter. Within 30 days of the Effective Date of this Permit, the Permittee shall notify the Director to schedule the installation of the device at a time when a representative of the Director may be present to observe the process.

5. Frequency of Sample Collection. Quarterly (every three (3) months), the permittee or designated representative shall collect samples for analysis on a schedule corresponding to the reporting requirements under Part II, Section E7. Whenever there is a change in laboratory processes or chemical components of the injected fluids that results in a change in constituents to be analyzed, or could result in an increase of the concentration of a regulated contaminant, another fluid sample shall be collected within 30 calendar days of the change in waste stream constituents. The analytical results from this sample shall be submitted to the Director within four (4) weeks of the sampling date.

6. Sampling Information to be Provided to the Director. Records of any monitoring activity required under this permit shall include:

- (a) The date, exact place, the time of fluid sampling;
- (b) The name of the individual(s) who performed the fluid sampling;
- (c) A certification by the individual(s) who performed the sampling as to the date, exact place, and the time of the sampling;
- (d) The name and address of the laboratory which analyzed the fluid;
- (e) The exact sampling method(s) used to collect the samples;
- (f) The date the fluid sample was sent to the laboratory;



- (g) The date(s) laboratory analyses were performed;
- (h) The name of the individual(s) who performed the analyses;
- (i) The analytical techniques or methods and quality control used by sampling and laboratory personnel; and
- (j) The results of such analyses.

7. Reporting Requirements.

- i. The first set of samples from the septic tank must be collected no later than 30 calendar days after the Final Permit is effective. In order to allow time for construction of the subsurface sample collection structure beneath the leachfield, sampling from below the leachfield must be done not later than 90 calendar days after the Final Permit is effective. The first report of the analytical results shall be sent to the Director no later than 4 weeks after the sample has been collected, with the subsequent reports due no later than January 1, April 1, July 1, and October 1 of each year. One report per year shall contain the results of sludge level monitoring in the septic tank as required per Part II, Section E1. If sampling results show no violation of permit limits after 2 years of sampling, the frequency sampling and reporting of results may be changed, at the discretion of the Director as a minor modification of this permit.
- ii. If there is a change in laboratory processes or constituents within the fluid waste entering the septic system that results in an additional analytical requirements or a potential increase in concentration of regulated contaminants per Part II, Section E5, then a sample shall be collected within 30 calendar days of implementing that change. The analytical results from the sample shall be submitted to the Director within 4 weeks of sample collection.
- iii. Reporting on septic tank sampling and disposal of sludge: Any time the septic tank is pumped, the Permittee shall include the following information in the next monitoring report to be submitted to the Director:
  - (a) date of pumping, and
  - (b) who performed the pumping.

8. Permit Limits. The fluids to be injected shall be limited to wash or rinse water from necropsy laboratory floors and working surfaces, fluids used during laboratory processes that have been treated according to BMPs, sanitary waste, and gray water, as specified in Part II, Section D2 and are subject to the permit limits described under Part II, Section D3. For reference, the limits for this permit are listed under Appendix B. Any unauthorized injectate or any analytical results that exceed a permit limit or other requirement shall be considered non-compliant with this permit and may result in enforcement action.

F. RECORD KEEPING

1. Records to Retain and Retention Time. The permittee shall retain records of all monitoring activity and results (whether or not specifically required by this permit), documentation of septic tank sludge disposal procedures, and other information required by this permit for the time periods specified below. These time periods may be extended at the discretion of the Director at any time. The following types of records should be retained.

- (a) For a period of at least three (3) years after the date the Permit Application was signed,

all data and supplemental information required to complete the Permit Application for this permit.

- (b) For at least three (3) years after the report was submitted, copies of all reports required by this permit.
- (c) Records regarding the nature and composition of all injected fluids as required per Part II, Section E4. The permittee shall continue to retain these records for a period of three (3) years after the closure of the injection well system unless the records are delivered to the Director or written approval to discard the records is obtained from the Director. This retention period may be extended at the discretion of the Director at any time.
- (d) Records of sludge level monitoring information as specified under Part II, Section E1.
- (e) Documentation containing information related to handling of sludge pumped from septic tank per Part II, Section E7,iii.

#### G. PLUGGING AND ABANDONMENT

The method for plugging and abandonment of any shallow injection well, and specifically any shallow injection well subject to the conditions of this permit, cannot allow the movement of a fluid containing any contaminant into any underground source of drinking water (USDW), if the presence of that contaminant may cause a violation of the primary drinking water standards under 40 CFR Part, 141, other health-based standards, or may otherwise adversely affect the health of persons.

1. Notice of Plugging and Abandonment. The permittee shall notify the Director in writing at least 30 calendar days before plugging and abandonment of the shallow injection well.

2. Plugging and Abandonment Plan. The permittee shall plug and abandon the well as provided in the Plugging and Abandonment Plan, Appendix D. The permittee may submit to the Director an alternative Plugging and Abandonment Plan for EPA review and approval as a modification to the final permit. The Plugging and Abandonment method must be approved by EPA prior to the plugging and abandonment of the septic tank and leachfield, if a method other than that included in Appendix D is used. EPA reserves the right to change the manner in which the septic system and leachfield will be plugged and abandoned if it is deemed that the designated closure method is not protective of any USDW.

3. Plugging and Abandonment Report. Within 60 calendar days after plugging the well, the permittee shall submit a narrative report to the Director. The person who performed the plugging operation shall certify per the requirements found at Part III, Section E9(d) that the report is accurate. The report shall consist of either: (1) a statement that the well was plugged in accordance with the approved Plugging and Abandonment plan; or (2) where actual plugging procedures differed from the plan, and a statement that specifies the different procedures which were followed with supporting justification for the selected closure alternatives.

## PART III. GENERAL PERMIT CONDITIONS

### A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection **only** in accordance with the conditions of this permit. The permittee, as authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into any USDW, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR, Part 141, or otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited.

Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of federal, state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health, or the environment, nor does it serve as a shield to the permittee's independent obligation to comply with all applicable UIC regulations.

### B. PERMIT ACTIONS

1. Modification, Reissuance, or Termination. The Director may, for cause or upon a request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR, §124.5, §144.12, §144.39, and §144.40. Also, the permit is subject to minor modifications for cause as specified in 40 CFR, §144.41. A request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated non-compliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

2. Conversion. The Director may, for cause or upon a request from the permittee, allow conversion of the well from a Class V injection well to a non-Class V well.

3. Transfers. This permit is not transferrable to any person except after notice is provided to the Director and the requirements of 40 CFR, §144.38 have been fulfilled. The Director may require modification, or revocation and reissuance, of the permit to change the name of the permittee and incorporate such other requirements as he or she may deem necessary under the SDWA.

### C. SEVERABILITY

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be thereby affected.

### D. CONFIDENTIALITY

In accordance with 40 CFR, Part 2, and 40 CFR, §144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "**CONFIDENTIAL BUSINESS INFORMATION**" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with

the procedures in 40 CFR, Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee; and
2. Information about the existence, absence or level of contaminants in drinking water.

E. GENERAL DUTIES AND REQUIREMENTS

1. Duty to Comply. The permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, or modification. Such noncompliance may also be grounds for enforcement action under the Resource Conservation and Recovery Act (RCRA) or other applicable federal statutes.

2. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The expiration date of this permit is ten (10) years from the effective date under Part I.

3. Penalties for Violations of Permit Conditions. Any person who violates any requirement of the UIC Program is subject to enforcement action under Section 1423 of the Safe Drinking Water Act (SDWA) (42 U.S.C. Section 300h-2), et seq. Enforcement may include administrative penalties up to \$157,500, with daily penalties of \$11,000 per well per violation. Civil penalties may be as much as \$32,500 for each day for each violation and mandate compliance with all provisions of the SDWA. Violations of this permit may be subject to such other actions pursuant to the RCRA. If the violation is willful, criminal penalties, and/or imprisonment, may result in accordance with Title 18 of the United States Code.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. **This provision includes the requirement that the Permittee implement the Best Management Practices specified in Appendix A.**

7. Duty to Provide Information. If at any time the Director issues a written request for information to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit, the permittee shall furnish the Director, within the time specified, the information requested. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by the permittee.

8. Inspection and Entry. The permittee shall allow the Director or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the condition of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

9. Signatory Requirements.

- (a) All reports required by this permit and other information requested by the Director shall be signed as follows:
  - (i) for a corporation, by a responsible corporate officer, such as a president, secretary treasurer, or vice president of the corporation in charge of principal business function, or any other person who performs similar policy- or decision-making functions for the corporation;
  - (ii) for a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
  - (iii) for a municipality, state, federal, or other public agency by either a principal executive or a ranking elected official.
- (b) A duly authorized representative of the official designated in paragraph (a) above may also sign only if:
  - (i) the authorization is made in writing by a person described in paragraph (a) above;
  - (ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
  - (iii) the written authorization is submitted to the Director.

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- (c) If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information or applications to be signed by an authorized representative.
- (d) Any person signing a document under paragraph (b) of this section shall make the following certification:

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

10. Reporting of Noncompliance.

- (a) Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
- (b) Compliance Schedules. Reports of compliance or noncompliance with or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted **no later than 30 calendar days following** each schedule date. The permittee will be notified by the Director in writing upon being subject to such a compliance schedule.
- (c) Twenty-Four Hour Reporting.

- (i) **The permittee shall report to the Director any noncompliance that may endanger health or the environment.** Information shall be provided, either orally or by voicemail, within 24 hours from the time the permittee becomes aware of the circumstances by telephoning **1.800.227.8917 and asking for the EPA Region 8 UIC Program Compliance and Enforcement Director,** or by contacting the EPA Region 8 Emergency Operations Center at 303.293.1788, if calling from outside EPA Region 8. The following information shall be included in the report:

- (A) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; and
- (B) Any noncompliance with a permit condition or malfunction of the injection system that may cause fluid migration into or between underground sources of drinking water.

- (ii) Written notice of any noncompliance that may endanger health or the environment **shall be provided to the Director within five (5) calendar days** of the time the permittee becomes aware of the noncompliance. The

written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to prevent or reduce recurrence of the noncompliance.

- (d) Other Noncompliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time of analysis submission. The reports shall contain the information listed in Part III, Section E10(c) of this permit.
- (e) Other Information. Where the permittee becomes aware that any relevant facts were not submitted in the permit application, or incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such correct facts or information within 14 calendar days of the time such information becomes known.

11. Oil Spill and Chemical Release Reporting. The operator shall comply with all other reporting requirements related to oil spills and chemical releases of reportable quantities per 40 CFR 304.2 or other potential impacts to human health or the environment by contacting the National Response Center (NRC) at 1.800.424.8802 or 202.267.2675, or through the NRC website at <http://www.nrc.uscg.mil/index.htm>.

# DRAFT

**A P P E N D I X   A**  
**BEST MANAGEMENT PRACTICES FOR HANDLING OF**  
**POTENTIALLY CWD PRION-CONTAMINATED WASTE**

**see file named**  
**Permit Appendix A BMPs**

**DRAFT**



## APPENDIX B

### List of Constituents to be Analyzed with Permit Limits and EPA Testing Methods

Total Metals				
Parameter Name	Permit Limit (mg/L)	Required Detection Limit(mg/L)	Standard Type	Analytical Methods
Antimony	0.006	0.003	MCL	200.8, 200.9
Arsenic	0.01	0.005	MCL	200.7, 200.8, 200.9
Barium	2	1	MCL	200.7, 200.8
Beryllium	0.004	0.002	MCL	200.7, 212.3
Boron	1.4	0.7	HA-Lifetime	200.7, 200.8, 200.9
Cadmium	0.005	0.0025	MCL	200.7, 200.8, 200.9
Chromium (total)	0.1	0.05	MCL	200.7, 200.8, 200.9
Copper	1.3	0.65	MCLG	200.7, 200.8, 200.9
Iron	5	2.5	Region 8 Permit Limit	200.7, 200.9
Lead	0.015	0.0075	MCL-TT	200.8, 200.9
Manganese	0.8	0.4	Region 8 Permit Limit	200.7, 200.8, 200.9
Mercury (inorganic)	0.002	0.001	MCL	245.1, 245.2, 200.8
Molybdenum	0.04	0.02	HA-Lifetime	200.7, 246.1, 246.2
Nickel	0.1	0.05	HA-Lifetime	200.7, 200.8, 200.9
Selenium	0.05	0.025	MCL	200.8, 200.9
Silver	0.1	0.05	HA-Lifetime	200.7, 200.8, 200.9
Strontium	4	2	HA-Lifetime	272.1, 272.2, 200.7
Thallium	0.007	0.001	MCL	200.8, 200.9
Zinc	2	1	HA-Lifetime	200.7, 200.8

**MCL:** Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the **MCLG** as feasible using the best available analytical and treatment technologies and taking cost into consideration. MCLs are enforceable standards.

**MCLG:** Maximum Contaminant Level Goal. A non-enforceable health goal which is set at a level at which no known or anticipated adverse effect on the health of persons occurs and which allows an adequate margin of safety.

**MCL-TT:** Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water. The Region 8 Drinking Water Program Toxicologist recommendation is to use this value as a Class V permit limit.

**HA:** Health Advisory. An estimate of acceptable drinking water levels for a chemical substance based on health effects information; a Health Advisory is not a legally enforceable Federal standard, but serves as technical guidance to assist Federal, State, and local officials.

**HA-Lifetime (HAL):** The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for a lifetime of exposure. The Lifetime HA is based on exposure of a 70-kg adult consuming 2 liters of water per day. The Lifetime HA for Group C carcinogens includes an adjustment for possible carcinogenicity.

**Region 8 Permit Limit:** In some cases when a national HAL is not available, a Region 8 Health Advisory (R8 HA) has been developed by the Region 8 Drinking Water Program Toxicologist. The LHA or the R8 HA is developed using the same scientific procedure as that used to develop the MCL but without the formal rulemaking process required for setting an MCL under the SDWA. When a LHA or a R8 HA is available, the Region 8 Drinking Water Program Toxicologist recommendation is to use that value as a Class V permit limit. After the permit limit has been through the public notice process and becomes part of the Final Permit, it becomes an enforceable limit.

Method 524.2/Method 8260* Volatile Organic Compounds			
Parameter Name	CAS No	Permit Limit (mg/L)	Standard Type
1,1,1,2-Tetrachloroethane	630-20-6	0.07	HA-Lifetime
1,1,1-Trichloroethane	71-55-6	0.2	MCL
1,1,2,2-Tetrachloroethane	79-34-5	0.0003	HA-Lifetime
1,1,2-Trichloroethane	79-00-5	0.005	MCL
1,1-Dichloroethylene	75-35-4	0.007	MCL
1,2-(cis)Dichloroethylene	156-59-2	0.07	MCL
1,2-(trans)Dichloroethylene	156-60-5	0.1	MCL
1,2,3-Trichloropropane	96-18-4	0.04	HA-Lifetime
1,2,4-Trichlorobenzene	120-82-1	0.07	MCL
1,2-Dibromomethane (Ethylene Dibromide EDB)	106-93-4	0.00005	MCL
1,2-Dichlorobenzene o-	95-50-1	0.6	MCL
1,2-Dichloroethane	107-06-2	0.005	MCL
1,2-Dichloropropane	78-87-5	0.005	MCL
1,3-Dichlorobenzene m-	541-73-1	0.06	HA-Lifetime
1,4-Dichlorobenzene p-	106-46-7	0.075	MCL
2-Chlorotoluene (o-)	95-49-8	0.1	HA-Lifetime
4-Chlorotoluene (p-)	106-43-4	0.1	HA-Lifetime
Acetone	67-64-1	7.0	Region 8 Permit Limit
Acrylonitrile	107-13-1	0.006	10 <sup>-4</sup> Cancer Risk
Benzene	71-43-2	0.005	MCL
Bromobenzene	108-86-4	0.005	HA-Ten Day
Bromochloromethane	74-97-5	0.09	HA-Lifetime
Bromodichloromethane (THM)	75-27-4	0.08	MCL
Bromoform (THM)	75-25-2	0.08	MCL
Bromomethane	74-83-9	0.01	HA-Lifetime
Carbon tetrachloride	56-23-5	0.005	MCL
Chlorobenzene (Monochlorobenzene)	108-90-7	0.1	MCL
Chlorodibromomethane (Dibromochloromethane) (THM)	124-48-1	0.08	MCL
Chloroform (THM)	67-66-3	0.08	MCL
Chloromethane	74-87-3	0.003	HA-Lifetime
Cyanogen Chloride	506-77-4	2	HA-DWEL
Dichlorodifluoromethane	75-71-8	1	HA-Lifetime
Dichloromethane (Methylene chloride)	75-09-2	0.005	MCL
Ethylbenzene	100-41-4	0.7	MCL
Hexachlorobutadiene	87-68-3	0.001	HA-Lifetime
Hexachloroethane	67-72-1	0.001	HA-Lifetime
Isopropylbenzene (cumene)	98-82-8	4	HA-DWEL
Methyl Ethyl Ketone	78-93-3	4	HA-Lifetime
Naphthalene	91-20-3	0.1	HA-Lifetime
Perchloroethylene (PCE) (Tetrachloroethylene)	127-18-4	0.005	MCL
Styrene	100-42-5	0.1	MCL
Toluene	108-88-3	1	MCL

Method 524.2/Method 8260* Volatile Organic Compounds			
Parameter Name	CAS No	Permit Limit (mg/L)	Standard Type
Total Trihalomethanes		0.08	MCL
Trichloroethylene (TCE)	79-01-6	0.005	MCL
Trichlorofluoromethane	75-69-4	2	HA-Lifetime
Vinyl chloride	75-01-4	0.002	MCL
Xylenes	1330-20-7	10	MCL

**\*Use EPA Method 524.2 or Method 8260 for analyses of these constituents**

**10<sup>-4</sup> Cancer Risk:** The concentration of a chemical in drinking water corresponding to an excess estimated lifetime cancer risk of 1 in 10,000.

**HA-Ten-Day:** The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure. The Ten-Day HA is also normally designed to protect a 10-kg child consuming 1 liter of water per day.

**HA-DWEL:** Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from drinking water.

Method 8270* Semivolatile Organic Compounds				
Analyte	CAS No.	Permit Limit (mg/L)	Method Detection Level (mg/L)	Standard Type
1,2-Dichlorobenzene	95-50-1	0.6	0.01	MCL
1,2,4-Trichlorobenzene	120-82-1	0.07	0.01	MCL
1,3-Dichlorobenzene	95-41-3	0.6	0.01	HAL
1,3-Dinitrobenzene	99-65-0	0.001	0.02 **	HAL
1,4-Dichlorobenzene	106-46-7	0.75	0.01	MCL
2-Chlorophenol	95-57-8	0.04	0.01	HAL
2,4-Dichlorophenol	120-83-2	0.02	0.01	HAL
2,4-Dinitrotoluene	121-14-2	0.1	0.01	DWEL
2,4,6-Trichlorophenol	88-06-2	0.01	0.01**	DWEL
2,6-Dinitrotoluene	606-20-2	0.04	0.01	DWEL
4-Nitrophenol	100-02-7	0.06	0.01	HAL
Acenaphthene	83-32-9	2	0.01	DWEL
Aldrin	309-00-2	0.001	N/A	DWEL
Anthracene	120-12-7	10	N/A	DWEL
Benzo[a]pyrene	50-32-8	0.0002	N/A	MCL
Benzo[a]anthracene	56-55-3	no std	0.01	
Benzo[b]fluoranthene	205-99-2	no std	0.01	
Benzo[g,h,i]perylene	191-24-2	no std	0.01	
bis[2-Chloroisopropyl] ether	108-60-1**	0.3	0.01	HAL
bis[2-Ethylhexyl] phthalate	117-81-7	0.006	N/A	MCL
Carbaryl	63-25-2	0.7	N/A	HAL
Carbofuran	1563-66-2	0.04	0.01	MCL

Method 8270* Semivolatile Organic Compounds				
Analyte	CAS No.	Permit Limit (mg/L)	Method Detection Level (mg/L)	Standard Type
Chlordane	57-74-9	0.002	N/A	MCL
Di-n-butyl phthalate	84-74-2	4	0.01	DWEL
Dieldrin	60-57-1	0.002	N/A	DWEL
Diethyl phthalate	84-66-2	30	0.01	DWEL
Dimethyl phthalate	131-11-3	no std	0.01	
Dinoseb	88-85-7	0.007	0.02**	MCL
Diphenylamine	122-39-4	0.0003	N/A	HAL
Disulfoton	298-04-4	0.0003	0.01	HAL
Endrin	72-20-8	0.001	N/A	MCL
Fluorene	86-73-7	1	0.01	DWEL
Heptachlor epoxide	1024-57-3	0.0002	N/A	MCL
Heptachlor	76-44-8	0.0004	N/A	MCL
Hexachlorobenzene	118-74-1	0.001	0.01	MCL
Hexachlorobutadiene	87-68-3	0.001	0.01	MCL
Hexachlorocyclopentadiene	77-47-4	0.05	0.01	MCL
Hexachloroethane	67-72-1	0.001	0.01	HAL
Indeno[1,2,3-cd]pyrene	93-9-5	no std	0.01	
Isophorone	78-59-1	0.1	0.01	HAL
Lindane	58-6-9	0.002	N/A	MCL
Malathion	121-75-5	0.1	0.05	HAL
Methoxychlor	72-43-5	0.04	N/A	MCL
Methyl parathion	298-00-0	0.002	0.01**	HAL
Naphthalene	91-20-3	0.1	0.01	HAL
Pentachlorophenol	87-86-5	0.001	0.05	MCL
Phenol	108-95-2	2	0.01	HAL
Pronamide	23950-58-5	0.05	0.01	DWEL
Pyrene	129-00-0	1.05	0.01	Calculated from rfd
Terbufos	13071-79-9	0.0009	0.02	HAL
Toxaphene	8001-35-2	0.003	N/A	MCL
Trifluralin	1582-09-8	0.005	0.01	HAL

**\*Use Method 8270 for analyses of these constituents**

**\*\*Method detection level too high.**

**\*\*\*MCL/HA Table has a different Cas No.**

**RfD: Reference Dose.** An estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.

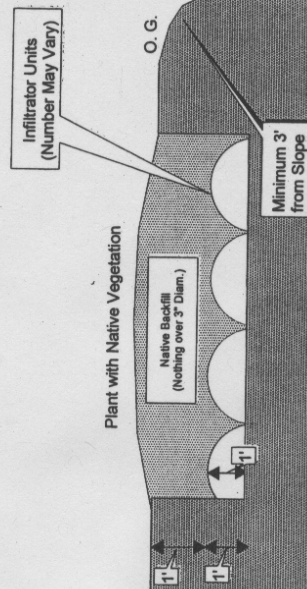
Biological Oxygen Demand				
Parameter Name	Permit Limit (mg/L)	Method Number	Source	Method Detection Limit (mg/L)
Biochemical Oxygen Demand	20 or 90% reduction from value measured in septic tank	405.1	EPA-NERL	N/A
BOD: 5-Day Test	20 or 90% reduction from value measured in septic tank	5210B	Standard Methods	2 mg/L

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# APPENDIX C

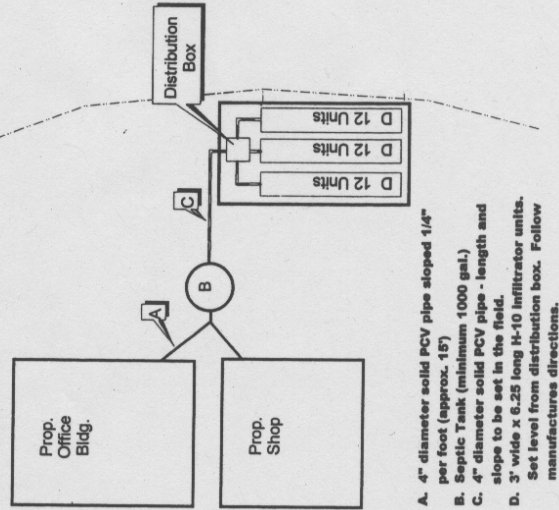
## SEPTIC SYSTEM CONSTRUCTION DIAGRAMS

### LEACH FIELD DETAIL CDOW - DEER PENS CROSS-SECTION (Not To Scale)



### PROPOSED TANK AND FIELD LAYOUT CDOW - DEER PENS (Not To Scale)

Infiltrator system. 35 Total Units.  
Required square footage = 534 sq. ft.  
Keep 25' from buildings, 10' from  
property boundary, and 100' from  
well and stream.



- A. 4" diameter solid PCV pipe sloped 1/4" per foot (approx. 15')
- B. Septic Tank (minimum 1000 gal.)
- C. 4" diameter solid PCV pipe - length and slope to be set in the field.
- D. 3' wide x 6.25 long H-10 Infiltrator units. Set level from distribution box. Follow manufactures directions.

## APPENDIX D

### PLUGGING & ABANDONMENT PLAN

If the facility waste system is to be plugged and abandoned, the septic tank inlet shall be plugged permanently. Fluid samples must be collected from the septic tank prior to emptying the septic tank. Fluid must be collected from both the liquid and sludge phases of the septic tank and analyzed in accordance with the procedures described in 40 CFR, Part 261, Appendix I (Representative Sampling Methods). The samples must be analyzed for ignitability as well as volatile organics and metals in accordance with the methods for Toxicity Characteristic Leaching Procedure (TCLP) in 40 CFR, Part 261, Appendix II as amended March 29, 1990. If other constituents have been used on-site, e.g. pesticides, sample for all constituents used on-site. The sludge must be transported to an alkaline hydrolysis unit or an incinerator, or dehydrated and disposed of in an approved treatment, storage, or disposal facility authorized under 40 CFR, Part 264 or Part 265. Sludge disposal procedures and location shall be tracked using proper documentation. If the analyses from either phase (liquid or sludge) in the septic tank indicate that the contents are above TCLP standards, the permittee of the facility must dispose of the hazardous phase(s) in accordance with the requirements of 40 CFR, Part 262. Use a licensed hauler, who is operating in accordance with 40 CFR, Part 263, to pump the septic tank.

If the waste in the septic tank does not fail TCLP, the fluid in the tank must be pumped by a licensed septic tank pumper. The tank then must be filled with an impervious material, that will not allow the fluid to be discharged into the leachfield. The drain lines and the leachfield will be flushed and either plugged or removed. Alternatively, the septic tanks may be removed, dismantled, and disposed of in a manner consistent with prevailing regulatory requirements. Closure methods must also comply with State and local regulations and requirements.

If contamination has occurred, the leachfield will be removed and all contaminated materials surrounding the leachfield will be removed for proper disposal. The excavation will be filled with clean fill material.

The Director shall be notified in writing 30 calendar days prior to planning closure. Within 60 calendar days after plugging the well, the permittee shall submit a narrative report to the Director meeting the requirements of Part II, Section G2.

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